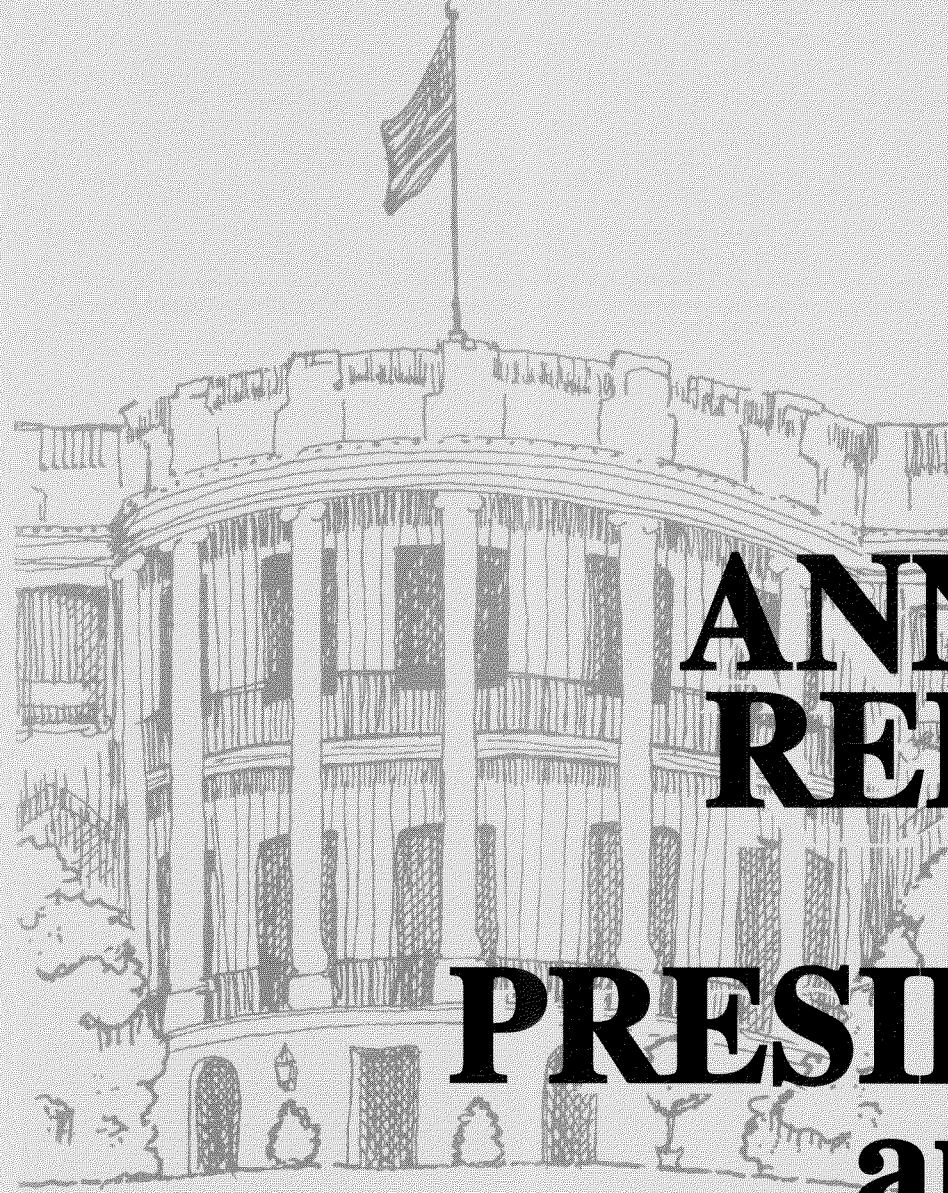

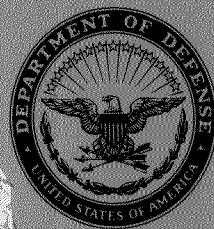


JANUARY
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ANNUAL REPORT to the **PRESIDENT and the CONGRESS**



Dick Cheney
Secretary of Defense

NUCLEAR FORCES AND STRATEGIC DEFENSE

The U.S. nuclear deterrent consists of three major elements: nuclear offensive forces; strategic command, control, communications, and intelligence (C³I) systems; and strategic defensive forces. Each of these force components contributes uniquely to the Nation's ability to deter and defend against nuclear attack.

Nuclear Forces in a Changing World

The revised U.S. defense strategy focuses on regional conflicts and the capabilities needed to defend U.S. interests in the post-Cold War world. As the risk of superpower confrontation recedes, we are changing, along with the former Soviet Union, our nuclear force structures. We are moving to eliminate those nuclear forces no longer required and to remove from alert those systems that do not need to be ready for immediate launch, but which can be returned to an alert status should conditions demand. Despite this revolutionary change, nuclear weapons are still needed to deter nuclear attack — the most fundamental and critical of U.S. national security objectives.

While the breakup of the Warsaw Pact means that our nuclear forces are not now required to deter a massive Soviet conventional attack in Europe, they continue to provide a stable, visible deterrent to nuclear attack or coercion by nations who have access to the technologies of mass destruction. A strong U.S. nuclear force provides a secure retaliatory capability that serves to deter the use of weapons of mass destruction while providing unambiguous warning to potential aggressors who have acquired these capabilities or are in the process of acquiring them.

The United States remains committed to retaining a reduced theater nuclear force posture as a link between its conventional and strategic nuclear forces and to demonstrate its continued commitment to the NATO alliance. NATO will cut its stockpile of land-based nuclear weapons — which consists only of aircraft bombs after the withdrawal of ground-launched nuclear weapons — by more than 80 percent over the next few years. The U.S. nuclear force not only serves as a deterrent to nuclear attack, but also serves to reassure friends

and allies of our continued global commitment.

While a smaller, but still effective, deterrent force is an absolute requirement, the proliferation of military technology has increased the need to develop and field effective ballistic missile defenses. The continuing aggressive development of a strategic defense — centered on the Global Protection Against Limited Strikes (GPALS) system — is vital to reshaping our forces to the realities of today's changing world.

U.S. Nuclear Force Reductions

The Strategic Arms Reduction Talks (START) Treaty, signed by President Bush and former Soviet President Mikhail Gorbachev in July 1991, was updated by the Lisbon Protocol in May 1992 to reflect the new multilateral character of the accord following the demise of the Soviet Union. The treaty was approved by the U.S. Senate in October 1992 and has been ratified by the Russian Federation and Kazakhstan. Ukraine and Belarus have yet to do so.

Even before the pact's entry into force, the United States has begun to retire older nuclear systems for programmatic reasons. These reductions would have been required in any case to meet START limits. All Poseidon submarines carrying Poseidon (C-3) and Trident I (C-4) missiles are being retired, as are all land-based Minuteman II missiles. The Poseidon missiles have already been removed from the submarines. The Minuteman II deactivations are well under way, with all of these missiles slated to be removed from their silos by 1995. All nuclear-armed B-52G bombers will be retired by the end of 1993.

As part of his earlier nuclear initiatives of September 1991 and January 1992, President Bush announced changes in and cancellations of several nuclear programs. The B-2 bomber program was reduced from 75 to 20 aircraft, and advanced cruise missile (ACM) procurement was capped at 640. (The cap was later reduced to 460 for programmatic reasons.) The heavy warhead program for the Trident II (D-5) missile was terminated. The short-range attack missile (SRAM II)

program was canceled, as was the mobile version of the Peacekeeper missile and the Small Intercontinental Ballistic Missile (ICBM). The entire class of ground-launched short-range nuclear weapons was eliminated. Finally, all nuclear weapons, except submarine-launched ballistic missiles (SLBMs), have been removed from U.S. surface ships, attack submarines, and land-based naval aircraft, and nuclear depth bombs have been retired.

On January 3, 1993, Presidents Bush and Yeltsin signed the START II Treaty, the culmination of President Bush's nuclear initiatives. This treaty will result in substantial reductions in the number of warheads deployed on the strategic nuclear forces of both the United States and Russia, bringing their levels well below START ceilings.

A critical element of the START II Treaty is the ultimate mutual elimination of all ICBMs carrying multiple warheads (referred to as multiple independently-targetable reentry vehicles, or MIRVs). The destructive potential of these systems and the incentive to use these high-value assets before their potential destruction by an adversary make them more likely to be considered as first-strike weapons, hence posing the single greatest threat to strategic stability. The agreement to eliminate MIRVed ICBMs represents the adoption of a more stable posture as befits the new relationship.

Under the terms of the START II Treaty, the United States and Russia will initially reduce total deployed warheads to a number between 3,800 and 4,250 on each side by the end of the seven-year START reduction period. In the second phase, overall force levels will be further reduced to between 3,000 and 3,500 by the year 2003 (or by the end of the year 2000 if the United States can contribute to the financing of the destruction or elimination of strategic offensive arms in Russia).

Within the seven-year period following entry into force of the START Treaty, each side would also be limited to no more than 1,200 MIRVed ICBM warheads (of which no more than 650 could be on heavy ICBMs) and 2,160 SLBM warheads. By the year 2003, all MIRVed and heavy ICBMs would be eliminated, and SLBM warhead limits would drop to between 1,700 and 1,750. The number of warheads counted for heavy bombers with nuclear roles will be

U.S. Strategic Nuclear Forces

Table 11

	End of FY 1993	START (1999)	START II ^a (2003)
ICBMs			
Minuteman II ^b	227	0	0
Minuteman III	500	500	500 ^c
Peacekeeper	50	50	0
Total	777	550	500
SSBNs/SLBMs			
Poseidon/C-4	8/96 ^d	0/0	0/0
Trident I/C-4	8/192	8/192	8/192
Trident II/D-5	6/144	10/240	10/240
Total	22/432	18/432	18/432^e
Bombers^f			
B-52G	0	0	0
B-52H	95	95	95
B-1B	96	96	0
B-2	0	20	20
Total	191	211	115

^aThis column presents one possible force structure under the START II Treaty.

^bNo longer on alert.

^cWarheads would be downloaded from three to one per missile.

^dIncludes two SSBNs no longer assigned a nuclear role.

^eWarheads would be reduced by about one-half.

^fTotal aircraft inventory, excluding B-52 and B-1B aircraft assigned conventional roles. Because of START Treaty counting rules, the numbers shown are greater than the values for primary aircraft authorized.

the number these aircraft are actually equipped to carry. The two sides also agreed that up to 100 heavy bombers that had never been equipped to carry long-range nuclear cruise missiles could be reoriented to conventional roles, without any requirement for extensive physical modifications to the aircraft, and that these reoriented heavy bombers would not count against the overall totals established by the START II Treaty.

The START Treaty is not superseded by the follow-on treaty, but will continue in force parallel to it. This will allow the START Treaty to provide (except as modified by the START II Treaty) the basic counting rules, definitions, verification procedures, and conversion and elimination procedures that will be used to implement the START II Treaty.

The United States plans to deploy about 4,250

nuclear warheads in the years 1999-2000 and 3,500 warheads after the year 2003. These levels are based on the military sufficiency of U.S. forces relative to the potential Russian threat. By the year 2003, all Peacekeeper missiles will be eliminated and the U.S. ICBM force will consist entirely of single-warhead Minuteman IIIs. At the end of the first phase of reductions, the United States will have no more than 2,160 SLBM warheads — a 37 percent reduction from the planned post-START level. By the year 2003, that number will drop to no more than 1,750, representing a 50 percent reduction from previously planned levels. The U.S. sea-based deterrent will be composed of Trident submarines carrying Trident SLBMs. A mix of conventional and dual-purpose long-range bombers — including B-2, B-1, and B-52H aircraft — also will be deployed.

These dramatic developments were made possible by the political revolution that has swept Central and Eastern Europe and the former Soviet Union over the last two and a half years and the steadfast military commitment of the United States and its allies to contain communism. It was the fundamental political and economic transformation of the Soviet Union and the resultant diminution of the East-West rivalry that enabled us to take initiatives and to reach agreements that will revolutionize the strategic relationship and the nuclear postures of the two sides.

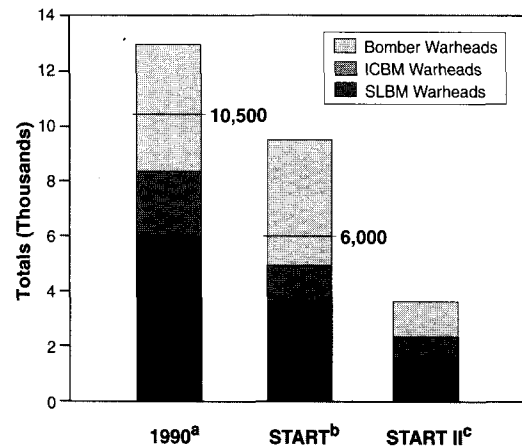
Modernization of Nuclear Forces

While dramatically reducing our offensive nuclear forces, we must ensure that the residual force provides an effective and robust deterrent to nuclear attack. This will require the continued maintenance of a diverse mix of offensive nuclear forces as well as a reliable C³I network. As military technology spreads, the United States must be able to deter, as well as defend against, the threat of limited ballistic missile attack from an increasing number of potential adversaries.

In signing the START and START II Treaties, the President has determined that, with full implementation of these agreements, the residual U.S. arsenal can, with appropriate modernization, provide the effective and flexible nuclear deterrent that will be required for the foreseeable future. Efforts to extend the service life of the existing Minuteman III ICBM force, along with the previously authorized introduc-

U.S. Strategic Nuclear Warheads

Chart 7



^a Numbers shown are actual warheads. The number 10,500 is shown for comparison purposes only and indicates the number of warheads that would be accountable under START counting rules if applied retroactively.

^b The United States and the former Soviet Union agreed to a sublimit of 4,900 on the aggregate number of warheads on deployed ICBMs and deployed SLBMs. The START Treaty limits each side to 6,000 accountable warheads, as indicated on the chart. Due to the bomber discount rules, however, the actual number of deployed warheads exceeds 6,000 by approximately 3,500.

^c Numbers shown are actual warheads. The START II Treaty eliminates the bomber discount rules of the START Treaty, counting each bomber as having the number of warheads it is actually configured to carry. This chart represents the limits that would be imposed by the second phase of the START II Treaty to be in force by the year 2003 (or 2000).

tion of the B-2 stealth bomber in the mid-1990s and completion of the 18-ship Ohio-class ballistic missile submarine force in 1997, are the extent of modernization efforts currently planned.

Nuclear Offensive Forces

U.S. nuclear offensive forces are made up of three distinct and complementary components: land-based ICBMs, sea-based ballistic missiles, and long-range bombers.

LAND-BASED INTERCONTINENTAL BALLISTIC MISSILES

The reductions now envisioned in the U.S. nuclear arsenal will result in a significantly smaller ICBM force, with the Minuteman III being the only deployed U.S. ICBM by the year 2003 (or the year 2000). The Department's efforts now focus on ensuring that the

service life of the Minuteman III can be extended to the year 2010 and beyond. Replacement of aging components in the guidance computer and associated electrical systems and refurbishment of the second- and third-stage rocket motors are planned. The Department also intends to explore advanced guidance technologies that could support replacement of the current Minuteman guidance system. Increased emphasis will be placed on detecting signs of age-related deterioration in the first-stage motor, which dates from the 1970s and has never gone through a depot-level refurbishment.

Plans for the Peacekeeper missile system include continued maintenance and testing, including flight testing through Fiscal Year (FY) 1996, and preparations for the system's eventual retirement. The previously planned Rapid Execution and Combat Targeting upgrade and other major modifications to Peacekeeper have been canceled.

SEA-BASED BALLISTIC MISSILES

Nuclear-powered ballistic missile submarines (SSBNs) armed with SLBMs have assumed even greater importance as a component of the nuclear arsenal. The ability of the SSBN force to remain virtually undetected at sea makes it the most survivable and enduring element of the U.S. nuclear force structure. The Trident II (D-5) missile, with its increased accuracy, range, and payload, gives the SLBM force the capability to hold at risk essentially the entire range of potential strategic targets now and in the foreseeable future. Under the START II Treaty, SLBM warheads would constitute as much as 50 percent of the 3,500 allowable deployed warhead total by the year 2003.

By the end of FY 1993, the U.S. SLBM force will consist of six pre-Ohio-class SSBNs armed with the Trident I (C-4) missile, eight Ohio-class SSBNs also carrying the Trident I, and six Ohio-class SSBNs equipped with the Trident II (D-5) missile. The four remaining Ohio-class SSBNs, funded in prior years but not yet completed, will also carry the Trident II. The FY 1994 budget supports continued operation of the Ohio-class SSBN force as well as continued production of D-5 missiles for operational testing and load-out of the Ohio-class SSBNs still in production. The maintainability of the Trident I system, along with considerations of cost, effectiveness, and changing requirements, will determine whether or not the eight

SSBNs armed with Trident I missiles are modified to carry the more capable and modern Trident II missile. Evaluation of the most effective warhead loading of the SSBN force, in light of the warhead restrictions in the START II Treaty and the termination of production of the heavy D-5 warhead, is ongoing.

LONG-RANGE BOMBER FORCES

The U.S. long-range heavy bomber force consists of B-52 and B-1B aircraft. In the mid-1990s, the first B-2 stealth bombers will become operational. All three bomber types are capable of delivering either nuclear or conventional weapons to any point on earth. They can attack fixed and mobile targets and large deployed ground forces, assess damage inflicted in earlier strikes, and conduct follow-on missions. In the nuclear role, the bomber force can deliver a combination of standoff weapons and gravity bombs, thereby complicating enemy air defenses. In the conventional role, bombers can be used alone to deliver standoff or gravity weapons or to add mass to a coordinated attack involving other platforms.

The START II Treaty, which counts each bomber with a nuclear role as having the number of warheads it is actually capable of carrying, effectively results in far lower numbers of nuclear bomber warheads than allowed by the START Treaty. Accordingly, we are planning to accelerate the retirement of SRAM-A missiles and of air-launched cruise missile (ALCM)-carrying B-52Gs, to put a portion of the ALCM-B force into dormant storage, and to reduce to 460 the number of ACMs produced. The B-1Bs will be reoriented to a conventional role and will not be counted under START II. Under the START II Treaty, the U.S.-planned nuclear long-range bomber force will consist of B-2s equipped with gravity bombs and B-52H standoff cruise missile carriers, armed with a mix of ALCM-Bs and ACMs. These changes will result in a smaller, but highly potent and modernized nuclear bomber force.

In recognition of the changing national security environment, the roles and missions of long-range heavy bombers are changing. While the nuclear mission remains important to our strategy of deterrence, the emphasis on that mission is decreasing, and our bombers are becoming increasingly available for conventional missions. Those missions are receiving

increased attention and funding. The significant contributions made by B-52s in Operation DESERT STORM demonstrate the value of long-range heavy bombers in major regional conflicts. The FY 1994 budget includes funding for conventional upgrades for the B-52H and B-1B forces. Highest priority is placed on the B-1B, which will form the core of our future conventional bomber capability. With an improved electronic countermeasures system to complement its high speed, excellent maneuverability, and relatively small radar cross-section, the B-1B will have much better survivability than the B-52H in a moderate threat environment. The B-1B is also receiving the Global Positioning System (GPS), new electronics, and computer upgrades that will enhance its employment of more accurate and effective conventional munitions, such as the Joint Direct Attack Munition, the Joint Standoff Weapon, and the Tri-Service Standoff Attack Missile. The B-52H and B-2 are also scheduled to be equipped with more modern weapons as they become available.

Strategic Command, Control, Communications, and Intelligence (C³I)

Even as the United States draws down its nuclear forces, timely and effective command and control remains vital to the credibility of these forces as a deterrent against nuclear attack.

The strategic C³I system includes warning sensors, command centers, and communications systems. Sensor systems furnish information on the size, source, and scope of an attack. Intelligence provides the threat backdrop for the warning and assessment of an attack. Command centers play a central role in decisionmaking and control of strategic forces. Communication systems connect warning sensors to command centers and link commanders with their forces.

The FY 1994 budget continues a major effort to improve satellite warning capabilities. A new system, a follow-on to the Defense Support Program (DSP), will offer worldwide coverage, enhanced detection capability, greater survivability, and faster reporting. It will be able to detect and accurately assess both long-range and short-range ballistic missile attacks against the United States or its allies.

As the Nation moves toward deployment of

defenses against limited ballistic missile attack, our command and control infrastructure must be modified to accommodate these new capabilities. Consequently, the FY 1994 program includes plans to augment the Cheyenne Mountain Complex and other facilities with the necessary command and control systems for national missile defense.

As a cost-saving measure, with no significant degradation in effectiveness, the airborne elements of the strategic command and control system have been restructured. A portion of the EC-135 fleet, which performs communications relay and serves as backup airborne command posts, is being deactivated. With the launch of the first Milstar communications satellite this year, strategic forces will be provided two-way, low-data-rate communications links that are highly resistant to jamming and nuclear effects.

Strategic Defense Forces

The strategic defensive forces of the United States provide protection against nuclear attack or coercion. To complement our current defense against bomber or cruise missile attack, we are developing a ballistic missile defense system that could protect the United States, its forward-deployed forces, allies, and friends against limited ballistic missile strikes.

BALLISTIC MISSILE PROLIFERATION

The proliferation of military technology of increasing sophistication and destructiveness is a trend that must be considered as we develop military forces for the 1990s. A prime example of this is the proliferation of ballistic missiles and weapons of mass destruction, including the capability to design, test, and fabricate chemical, biological, and nuclear weapons.

Today, more than 15 Third World nations have ballistic missiles. By the year 2000, perhaps 20 such nations may have them, and some of those missiles may be armed with chemical, biological, and possibly nuclear warheads. These technologies pose a threat that is largely regional in character. However, the trend is clearly in the direction of systems of increasing range, lethality, and sophistication. After the turn of the century, some countries hostile to this Nation could acquire ballistic missiles that could threaten the United

States. Over the next 10 years, we are likely to see several Third World nations establish the infrastructure and develop the technical knowledge required to undertake ICBM and space-launch vehicle development, although testing and production of such missile systems would take some time.

One of the lessons of the Persian Gulf War with major implications for future regional contingencies is the political and military importance of possessing a capability to protect against the threatened or actual use of ballistic missiles and weapons of mass destruction. The Gulf War demonstrated that we face such a direct threat today and foreshadowed the possible consequences should a dictatorially-governed regime gain the capability to threaten the United States with long-range missile attack.

Deploying defenses to protect against this threat is an important element in the defense strategy. The United States cannot accept a situation in which the threatened or actual use of ballistic missiles is allowed to constrain a U.S. President's flexibility in employing military power when necessary to support U.S. national security objectives and commitments abroad or to pose an unconstrained threat to U.S. forces when they are deployed in the field. The United States also cannot ignore the growing threats posed by ballistic missiles to the territory and forces of U.S. friends and allies. The important role that defenses played in the U.S.-led international Coalition and in the support of Israel during Operation DESERT STORM is a good example of the importance of this capability.

BALLISTIC MISSILE DEFENSE

President Bush's decision in January 1991 to refocus U.S. ballistic missile defense efforts on a capability to provide protection against limited strikes, including accidental or unauthorized launches of up to 200 warheads, was a direct response to the changing international security environment. It took into account the positive changes occurring in our relationship with what are now the independent states of the former Soviet Union, and our growing concern over the threat posed by the proliferation of ballistic missiles.

The Department continues to develop for deployment a ballistic missile defense system that will provide protection to the United States, its forward-

deployed forces, allies, and friends against limited ballistic missile strikes. The concept under which this system is being developed is called GPALS. The GPALS program is integrating the development and deployment of highly effective national and theater ballistic missile defenses to achieve the goals specified in the Missile Defense Act and to meet existing military requirements.

As part of GPALS, and consistent with the Missile Defense Act, the FY 1994 budget continues to support a program to develop and field an Antiballistic Missile (ABM) Treaty-compliant defense, located at a single site and capable of providing protection to the continental United States (CONUS) against northerly attacks composed of a few tens of reentry vehicles. Because the capability provided by such a system is constrained by the ABM Treaty, the system could not defend the continental United States to the level offered by the full GPALS system. This single-site defense would, however, be the first step in the deployment of the highly effective ballistic missile defense system that is the objective of the GPALS program. Last year, the Department's plan for developing GPALS included an option — encompassing prudent management of cost and schedule risks — to achieve an initial national ballistic missile defense capability with preproduction hardware at a single site by FY 1998. If that option were not exercised, the plan called for deploying the initial national ballistic missile defense capability with production hardware in FY 2002. Responding to modifications in the Missile Defense Act that relaxed the sense of urgency for fielding an early U.S.-based defense and that required a low-to-moderate risk and low-to-moderate concurrency program, and in light of budget reductions, the Department's revised plan for GPALS delays deploying the initial single-site defense to FY 2004, while retaining an option to field a contingency capability as early as FY 2000.

Ballistic missile proliferation poses a threat not only to the United States and its friends and allies, but to the former Soviet Union as well. This threat and the need for enhanced defenses to address it have been recognized by the democratically elected government of Russia. President Yeltsin announced in January 1992 that he was "ready to work out and subsequently create and jointly operate a global system of defense." In the Joint Statement at the Washington Summit six months

later, the two Presidents endorsed a global protection system and established a High-Level Group to develop the concept, its legal basis, and means for its implementation. The subsequent work of this High-Level Group and of its subordinate working groups suggests that our two nations are finding some common ground on the role that ballistic missile defenses can play. The United States is continuing discussions with Russia, allies, and others to consolidate progress toward implementation of a concept for a global protection system.

THEATER MISSILE DEFENSE (TMD)

The theater missile defense (TMD) program, a key element of the GPALS effort, is developing technologies and systems to deny hostile forces the effective use of theater missiles in regional conflicts. This program will integrate treaty-compliant theater and strategic defensive capabilities and incorporate allied contributions to regional defenses. TMD systems will provide a stand-alone capability that will be improved significantly by the deployment of space-based surveillance systems (Brilliant Eyes) and space-based interceptors (Brilliant Pebbles).

The TMD program involves all four Services and several allies in the development of technology and the selection of systems to provide an antimissile defense. The program includes missile interceptors, fire-control and long-range surveillance radars, and improved battle management systems. The near-term goal is to improve antimissile capabilities, beginning with enhancements to existing systems, such as the Army's Patriot missile. Emphasizing deployable and rapidly relocatable advanced theater defenses, the Theater High-Altitude Area Defense (THAAD) missile system has entered into the demonstration/validation phase of acquisition. The first elements of the system are planned for deployment in the mid-1990s, with the full system to be fielded by the end of the decade.

AIR DEFENSE

The mission of U.S. air defense forces is to maintain sovereignty over U.S. airspace, to provide warning of a bomber or cruise missile attack against North America, and to limit damage should such an attack occur.

Modernization of U.S. interceptor forces and surveillance systems is almost complete. Air National Guard F-15s and modified F-16 interceptors (complemented by Canadian CF-18s) will continue to provide a defense against penetrating bombers and cruise missile carriers. North Warning System (NWS) radars along the Arctic and Labrador coasts, and over-the-horizon backscatter (OTH-B) radars on the Atlantic and Pacific coasts, would provide reliable early warning of bomber attacks approaching from the north, east, or west. The diminished threat of such attacks, however, will permit a reduction of the interceptor force to 10 squadrons by 1994. Operating costs will be reduced by maintaining fewer aircraft on alert, limiting operating hours for some NWS radars, and maintaining the OTH-B sites in inactive status following completion of testing.

Despite the reduction in the near-term threat, advances in cruise missile technology and the possible proliferation of these difficult-to-detect weapons raise a new challenge that cannot be met merely by upgrading current systems. The Air Defense Initiative is exploring some of the more promising technical approaches for surveillance, interception, and battle management.

Conclusion

For more than four decades, the policy of nuclear deterrence, supported by the nuclear forces of the United States, has kept our territory and forces safe from nuclear attack. While nuclear deterrence remains a cornerstone of U.S. defense policy, the forces that support that policy are being reshaped to account for the changing nature of the threat. Our offensive forces, while smaller in size, must, however, remain flexible, robust, and enduring. The proliferation of ballistic missile technology and weapons of mass destruction to nations that may be willing to use them requires improved ballistic missile defenses. The strategic and theater ballistic missile defenses being developed under the GPALS program will provide such protection to the United States as well as to U.S. and allied forces in the field.